Claim Listing

1-73.   (Canceled)

74.   (Currently Amended) A data processing system comprising:

one or more computer processors programmed to receive health information from a

patient using software operable to pose a logic-driven, branching series of questions to

identify, discriminate current from past, and prioritize said patient's major symptoms,

(a) wherein said major symptoms are ranked by priority to said patient; and wherein

exploratory questions are used to survey selected topics;

(b) wherein said exploratory questions ask about groups of related items;

(c) wherein said exploratory questions determine a time frame of relevance to said patient

and the priority of a symptom or provisional problem,

(d) wherein said priority is characterized by one or more patient factors, selected from

the group of: patient's priority for discussion with a clinician, severity of said symptom,

impairment of functional abilities, impact on quality of life resulting from said symptom, or

system criteria based on factors reflecting a potential medical clinical importance of said

symptom;

(e) wherein said software is further operable to construct subsequent, more detailed

questions from a database of potential questions, based upon said patient's responses to said

exploratory questions; and

(f) wherein said software is operable on the one or more computer processors or on a

server distributed to the one or more computers over an Internet connection, an intranet

connection, or local area network.

75.   (Currently Amended) The system of claim 74, wherein said system is operable to integrate an assessment of characterization detail for related symptoms in a group of potentially associated symptoms;

(a) wherein potential associations between symptoms are identified at a time of authoring of interview content based upon clinical knowledge;

(b) wherein severities of candidate symptoms in associations are obtained during the ~~an~~ interview;

(c) wherein a most severe symptom in an association (hereinafter "index complaint ~~symptom~~") is identified;

(d) wherein characterization detail is obtained about one or more index complaints ~~symptoms~~, as appropriate for clinical importance or relevance to said patient;

(e) wherein an interview question is asked about whether any of said patient's other symptoms in said association share features in common with said index complaint ~~symptom~~;

(f) wherein, ~~for areas~~ where symptoms are associated or features are shared, no further characterization is performed, ~~redundant characterization detail is skipped for associated symptoms~~ or subsequent interview questions characterizing associated symptoms are combined; and

(g) wherein a risk of frustrating said patient is reduced by detecting relations between symptoms, when they exist, or allowing symptoms to stand alone, when no association is identified.

76.   (Currently Amended) The system of claim 74 further operable to identify and

measure severity and functional impact of a full range of multiple potentially overlapping

physical and psychosocial symptoms in any combination;

(a) wherein an assessment uses screening questions relating to physical and psychosocial

symptoms;

(b) wherein said psychosocial symptoms comprise at least one of the group of: substance

use, depression, anxiety, ~~panic,~~ stress, <u>somatization,</u> ~~somatoform disorder,~~ health attitude,

behavior, illness concern, and anxiety;

(c) wherein said overlapping physical and psychosocial symptoms comprise symptoms

that are concurrent or that share location or other features potentially confusing to patients or

physicians;

(d) wherein related symptoms are grouped in order to facilitate assessment of symptom

severity, frequency, impact on functional abilities, and quality of life; and

(e) wherein separate scores are calculated for each of said symptom groups in order to

determine whether said patient has one or more than one symptom complex and to separately

assess severity and functional impact of each symptom group over time <u>or</u> in response to ~~time or~~

treatment for purposes of patient care, research, or quality assurance.

77. (Previously Presented)   The system of claim 74 further operable to assess

impairment in quality of life and functional abilities in relation to a plurality of symptoms

and medical conditions;

(a) wherein quality of life questions are created to probe limitations in a plurality of

general domains that may be related to one or more underlying medical condition;

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(b) wherein said quality of life questions are asked without reference to whether a

limitation is due to a health or emotional condition, symptoms, injury, or other problem; and

(c) wherein impact of each group of related symptoms or each health condition is

determined by asking about resulting severity, frequency, or perceived impact on quality of life.

78.   (Previously Presented)   The system of claim 77,

(a) wherein said software is operable to display areas of general quality of life and

functional abilities that said patient has reported are impaired, and to offer said patient choices

about potential causes of such impairment; and

(b) wherein said software is operable to sequentially display each of one or more general

quality of life issues reported by said patient to be limited by symptoms or health conditions, list

various symptoms and health conditions that said patient has reported are most severe, and offer

response options to indicate a degree to which each symptom or health condition causes

limitation of indicated general quality of life domains.

79.   (Previously presented)   The system of claim 74 further operable to directly

assess dimensions of the quality of care and provide feedback to clinicians or administrators

about areas where action could be taken to correct apparent problems with said quality;

(a) wherein said system is operable to display questions regarding one or more of:

patient understanding of a health condition, patient health attitudes and behaviors, patient

willingness to change health behaviors, patient perception of communication with a clinician and

whether patients were heard and respected, patient observation about health care received,

patient understanding of what to expect and what to watch out for regarding health conditions or

treatment, patient understanding of treatment received, patient understanding of medications to

be used, or patient compliance with medication and with treatment; and

(b) wherein patient-reported quality of care data are integrated into a clinical report and

flagged to identify problem areas; such quality improvement data are presented to clinicians with

suggestions regarding correcting apparent problems with the quality of care; or said software

provides brief and focused education to a patient who needs or desires additional information

about said patient's health condition.

80.   (Currently amended)   The system of claim 74, further operable to calculate a

severity score based on patient data regarding severity of symptoms;

(a) wherein different levels of severity are assigned different values;

(b) wherein symptoms from a similar region or system of a patient's body are grouped

together, offering patients the option of confirming this association, after which a score assigned

to each group is computed, and scores are reported to facilitate interpretation by a clinician with

regard to relative importance of a symptom group and possible implications of observed

symptom patterns, and given scores of a particular group across successive interviews of said

patient, to reflect changes in severity over time; and

(c) wherein scores are reported to facilitate interpretation by a clinician with regard to

relative importance of a symptom group and possible implications of observed symptom patterns

patters, and, given scores of a particular group across successive interviews of said patient, to

reflect changes in status severity over time.

81.   (Canceled)

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82.   (Previously Presented)   The system of claim 74, further operable to:

(a) inform patients about routine procedures, surgeries or research for which informed consent is required, and using text, images, or video or audio presentations to educate the patient about said routine procedures, surgeries or research; and

(b) obtain informed consent from a patient who agrees to undergo at least one of said routine procedures, surgeries, or research.

83.   (Canceled).

84. (Currently Amended) The system of claim 76 further operable to characterize key features and detect symptom patterns of potential diagnostic, or therapeutic, or prognostic importance relating to characterization details, and to sensitization and cross-referral of nerves from viscera and body wall, enhanced or diminished visceral or somatic sensation and symptom reporting by the patient;

(a) wherein detecting symptoms in exploratory questions optionally triggers a detailed, systematic characterization of features, including at least one of the group of: location, description, timing, precipitating factors, and relieving factors;

(b) wherein multiple symptoms and the characterization details are gathered and interpreted, wherein the characterization details include at least one of the group of: expanded referral, overlapping patterns of precipitation and relief, use of multiple descriptive terms, and evidence of somatic (fibromuscular body wall) involvement;

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(c) wherein a history of prior symptoms, or an absence thereof, provides evidence of the patient's pattern of symptomatic response; and

(d) wherein said symptom patterns <u>and</u> ~~or~~ the characterization details provide information implicating altered <u>sensitization and cross-referral of nerves from viscera and body wall,</u> ~~visceral or somatic sensitization, and a pattern~~ and psychobehavioral dimensions of symptom reporting by the patient.

85. (Currently Amended) The system of claim 76 further operable to discover, discriminate, and measure multiple symptoms and uncover symptoms obscured by overlap with other existing or new symptoms;

(a) wherein targeted instructions are provided to educate the patient about a possibility of overlapping symptoms and how to discriminate the overlapping symptoms by focusing on characteristic features;

(b) wherein multiple symptoms may be discriminated by the patient as the same or different, based upon questions about the characteristic features,

(c) wherein obscured or overlapping symptoms can be suspected based upon a response indicating at least one of the group of: two symptoms overlapping in location, <u>timing</u>~~time~~, characteristic features such as a pattern of precipitation or relief, a symptom being described as both a pain and a discomfort, having expanded referral (being felt over a wide area), a character of the symptom being described by multiple terms, or a symptom pattern changing over time;

(d) wherein patients are offered an option of a response indicating that potentially overlapping symptoms are the same, related but not the same, different, or uncertain; and

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(e) wherein optional branching series of questions are provided to gather further details for:

symptoms that are different, or related but not the same, whereas subsequent questions are

skipped for symptoms that are the same or where the patient is uncertain about a relationship

of the related symptoms.

86. (Previously Presented) The system of claim 74 further comprising a System Response

Analyzer adapted to use logic to monitor the patient's responses for an inconsistent response, the

inconsistent response triggering a detailed assessment of patient consistency and veracity.

87. (Previously Presented) The system of claim 74 further operable to generate an agenda for

a clinic session, the agenda comprising a list of symptoms ranked by patient or system priority;

wherein the agenda provides information for estimating a time required for a practitioner to see

the patient and a skill level of the practitioner required to see the patient.

88. (Currently Amended) The system of claim 74 further operable to support problem

management by physicians, wherein symptoms and active medical conditions (such as diabetes,

chronic lung disease), are presented as a problem;

(a) wherein a physician module is provided to filter, sort, and review patient-entered, physician-

entered, or system-imported data, and to add physician-entered data;

(b) wherein the problem name is editable by the physician;

(c) wherein the problem can be created, updated, merged or divided by the physician;

(d) wherein all data is can be linked to a provisional problem, automatically by the physician

module, or by the physician;

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(e) wherein data entered by the patient or the physician, or imported by the system can be linked

at entry or by system criteria, to at least one type of data selected from the group of data for:

initial and return visit, symptom, medical condition, medical history, physical finding, test

result, treatment type, response to treatment, side effects from treatment, plan for diagnosis,

treatment plan, or problem summary; and

(f) wherein data can be filtered, sorted, and presented by criteria, the criteria providing a

problem, data, physician author, activity status(active or inactive problem), or data type.

89. (Previously Presented) The system of claim 74 further operable to support a return visit

by the patient;

(a) wherein an agenda for the return visit may be set by: a return visit agenda set by a physician

at a prior visit, completion of remaining interview modules from the prior visit, research

protocol, or administrative protocol, wherein the administrative protocol gathers quality

assurance data;

(b) wherein at the return visit, the patient is queried about any reasons they have for the return

visit;

(c) wherein the patient's reason for the return visit can be compared with a physician's reason

for the patient's return visit;

(d) wherein the patient is provided an option to review and update their prior symptoms and

responses;

(e) wherein other symptoms are optionally surveyed to ascertain new developments; and

(f) wherein use of prescribed treatments by the patient can be sought as a measure of

compliance.